

Implementation of Operating Experience Program for the National Nuclear Security Administration (NNSA) Status Report - December 2007

On June 12, 2006, the Department of Energy (DOE) issued DOE O 210.2, *DOE Corporate Operating Experience Program*. The Order requires the establishment of a DOE-wide program for management of operating experience to prevent adverse operating incidents and to expand the sharing of good work practices among DOE sites.

On February 28, 2005, National Nuclear Security Administration NNSA issued its Safety Management Functions, Responsibilities and Authorities Manual (FRAM), Revision 1. A key objective was to implement the Integrated Safety Management elements through the establishment and maintenance of the NNSA. The FRAM also assigns the responsibilities to NNSA HQ Offices, the Service Center, and Site Offices. A revised FRAM will be issued imminently with specific reference to DOE O 210.2.

On October 1, 2006, the Secretary of Energy created the Office of Health, Safety and Security (HSS) to integrate DOE Headquarters-level functions for health, safety, environment, and security into one unified office. HSS addresses Department-wide cross-cutting issues and enhances collaboration in the area of operating experience among DOE offices and external organizations.

On August 13, 2007, the NNSA Administrator designated the NNSA Senior Advisor for Environment, Safety & Health, NA-3.6, to work with line management to implement DOE O 210.2. The following is a brief summary of activities used to implement DOE O 210.2:

Safety Incidents Lessons Learned

Each week, HSS prepares and distributes Lessons Learned. HSS also manages the Lessons Learned database. Contractors send in Lessons Learned into HSS, and anyone can place themselves on the Lessons Learned distribution list. The database allows for users to apply a filter to the incidents sent to them.

Events Analysis

Per section 5.8 of DOE M 231.1-2, *Occurrence Reporting and Processing of Operations Information*, and Section 5.d(3) and e.(3) of DOE O 210.2, NNSA sites complete quarterly analyses of occurrences of all significance categories over the previous twelve months. This information is reported to NNSA HQ which enables NNSA to analyze events at all its sites and identify common trends that need to be addressed.

Assessments of Lessons Learned per other DOE Orders

Since DOE Order 210.2 contains assessment requirements that are already in place from other orders or were already in place (such as the DOE lessons learned standard), processes and mechanisms already exist for the Operating Experience program. For example:

- The NNSA Chief Defense Nuclear Safety (CDNS) recently completed a round of biennial reviews which assessed the Feedback and Improvement functional area. The CDNS reviews focused on site office performance, where one criterion in the Feedback and Improvement functional area evaluated the contractor lessons learned program. The CDNS reviews concluded that at all of the sites the contractor had implemented the lessons learned program.
- NA-3.6 provides quarterly safety briefings to the NNSA Administrator and senior line managers with emphasis on safety trends and areas that need improvement.
- Over the past several years, DOE organizations conducted independent oversight inspections under DOE Order 470.2B. These inspections evaluated the implementation of lessons learned programs at DOE sites and NNSA sites.
- NNSA site offices are in the process of refining oversight of contractor performance in that pertain to lessons learned, such as DOE Order 210.2 *the Operating Experience program*; DOE Order 226.1, *Implementation of DOE Oversight Policy*; DOE Manual 450.4-1, *Integrated Safety Management System Manual*; and DOE Order 414.1C, *Quality Assurance*.

It has not been determined what gaps exist between these orders and DOE 210.2 requirements. As a result, NNSA HQs is developing a CRAD which will determine what requirements have been met through other existing DOE orders. In developing this CRAD, NNSA will perform a gap analysis of these orders to better formalize a CRAD per DOE Order 210.2.

Status of Headquarters OPEX Program

Given the requirements for lessons learned across DOE Orders, NNSA's Corporate Lessons Learned program recently conducted a survey (completed in October 2007) to evaluate the implementation of the lessons learned program across the Complex. Specifically, NNSA HQs surveyed across the NNSA complex requesting information on how Site Offices and contractors utilized Operating Experience products and sought input on what the Site Offices wanted from an NNSA HQs lessons learned program.

Based on this input and other factors, NNSA determined that while the OPEX program was being implemented at all sites, implementation varied among sites, and sites did not have enough guidance from NNSA to keep with the full intent of DOE Order 210.2. Better metrics also must be developed in accordance with DOE Order 210.2 to determine

Better metrics also must be developed in accordance with DOE Order 210.2 to determine the effectiveness of the programs at a site and complex-wide level. As a result of these conclusions, the Administrator promulgated NNSA expectations for the NNSA Operating Experience/lessons learned program. Also, in preparation for this report, NNSA Site Offices were queried in more detail about their implementation of DOE Order 210.2.

As stated in the transmittal letter, NNSA Headquarters has determined that it will conduct its own assessments to determine the effectiveness of the implementation of the NNSA OPEX program.

Compliance with DOE O 210.2

As noted in the transmittal letter, implementation of the DOE OPEX that meets the full requirements of the order has not matured enough for NNSA to implement a systematic line oversight approach that would evaluate the effectiveness of site implementation. In the DNFSB 2004-1 IP, commitments were made to upgrade the Operating Experience program. Under Commitment 18, DOE Order 210.2 was issued, formalizing some existing processes, and reiterating several other requirements from other DOE directives.

NNSA has verified that while the DOE O 210.2 is being implemented by its organizations, improvement is needed to ensure effective implementation across the complex. Similarly, while DOE O 210.2 has been included in the contracts of most of our major facilities, NNSA needs to work with all the sites to ensure the order is implemented effectively at the site offices, contractors, and subcontractors.

NNSA will provide a briefing to DNFSB on the status of implementation of DOE O 210.2 by December 31, 2008.